AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method for biostimulating a target region of a subject, comprising:

irradiating the target region with a radiation~~, generated by a radiation source, to have~~ having at least one selected wavelength component suitable for biostimulating the target region; and ~~biostimulation, for a selected time duration, said time duration being chosen so as to cause biostimulation of said target region, and~~

controlling a flux of said radiation to achieve a desired temperature profile in the target region;

wherein said target region is irradiated for a time duration selected to achieve the desired biostimulation of the target region. ~~a temperature of said irradiated target region with a set of one or more sources independent of said biostimulating radiation so as to modulate efficacy of said biostimulation, wherein controlling the temperature comprises heating a first selected portion of the target region and cooling a second selected portion of the target region~~.

2. (Original) The method of claim 1, further comprising selecting said wavelength component to be in a range of about 380 nm to about 1250 nm.

3. (Original) The method of claim 1, further comprising selecting said wavelength component to be in a range of about 380 nm to about 600 nm.

4. (Original) The method of claim 1, further comprising selecting said wavelength component to be in a range of about 380 nm to about 450 nm.

5. (Original) The method of claim 1, further comprising selecting said wavelength component to be in range of about 600 nm to about 700 nm.

6. (Original) The method of claim 1, further comprising selecting said wavelength component to be in a range of about 760 nm to 880 nm.

7. (Currently Amended) The method of claim 1, wherein said radiation ~~source generates radiation with~~ has a narrow bandwidth.

8. (Original) The method of claim 7, wherein said narrow bandwidth is less than about 100 nm.

9. (Original) The method of claim 1, further comprising selecting said time duration to be in a range of about 10 seconds to about one hour.

10. (Original) The method of claim 1, further comprising selecting said time duration to be in a range of about 10 minutes to about one hour.

11. (Currently Amended) The method of claim 1, wherein said ~~radiation delivers a power~~ flux is in a range of about 1 to about 250 mW/cm^2 to said target region.

12. (Currently Amended) The method of claim 1, wherein said radiation delivers a power flux in a range of about 10 to about 100 mW/cm^2 to said target region.

13. (Currently Amended) The method of claim 1, wherein said ~~radiation delivers a power~~ flux is in a range of about 1 $Joule/cm^2$ to about 1000 $Joules/cm^2$ to said irradiated target region during said time duration.

14. (Currently Amended) The method of claim 1, wherein said ~~radiation delivers a power~~ flux is in a range of about 1 $Joule/cm^2$ to about 100 $Joules/cm^2$ to said irradiated target region during said time duration.

15. (Original) The method of claim 1, wherein irradiating said target region comprises exposing said target region to a beam of radiation having a cross-sectional area in a range of about 1 cm^2 to about 200 cm^2.

16. (Cancelled)

17. (Cancelled)

18. (Cancelled)

19. (Cancelled)

20. (Currently Amended) The method of claim 1 ~~16~~, wherein at least of portion of said temperature profile in the target region is ~~heating raises the temperature of said target region to a value~~ in a range of about 37°C to about 50°C.

21. (Currently Amended) The method of claim 1 ~~16~~, wherein at least of portion of said temperature profile in the target region is ~~heating raises the temperature of said target region to a value~~ in a range of about 37°C to about 45°C.

22. (Currently Amended) The method of claim 1 ~~16~~, wherein at least of portion of said temperature profile in the target region is ~~heating raises the temperature of said target region to a value~~ in a range of about 37°C to about 42°C.

23. (Currently Amended) The method of claim 1, further comprising ~~wherein~~ cooling ~~said second~~ a selected portion of the target region ~~decreases efficacy of said biostimulation~~.

24. (Currently Amended) The method of claim 23, wherein said cooling lowers the temperature of the selected portion of said target region to a value in a range of about ~~abut~~ 0°C to about 36°C.

25. (Currently Amended) The method of claim 23, wherein said cooling lowers the temperature of the selected portion of said target region to a value in a range of about 15°C to about 36°C.

26. (Currently Amended) The method of claim 1, ~~wherein~~ further comprising producing a first portion of the radiation from a first radiation source ~~of the set provides heating for said first~~

and producing a second portion of the radiation from ~~portion and~~ a second radiation source ~~of the set provides cooling for said second portion~~.

27. (Currently Amended) The method of claim 26 ~~1~~, wherein the first portion of the radiation includes the at least one selected wavelength component. ~~said set comprises a narrowband source to provide heating.~~

28. (Currently Amended) The method of claim 26 ~~1~~, wherein the step of controlling the flux comprises controlling the flux of the first portion of the radiation ~~said set comprises a broadband source to provide heating~~.

29. (Currently Amended) The method of claim 1, wherein the first portion of the radiation includes the at least one selected wavelength component and wherein the step of controlling the flux comprises controlling the flux of the second portion of the radiation ~~said set comprises a source configured to generate radiation having one or more wavelength components in a range of about 380 nm to about 2700 nm~~.

30. (Cancelled)

31. (Cancelled)

32. (Currently Amended) The method of claim 1, wherein controlling the flux ~~the temperature~~ comprises placing said target region in thermal communication with a surface having a selected temperature.

33. (Currently Amended) The method of claim 1, wherein controlling the flux ~~the temperature~~ comprises generating a flow of a fluid over said target region to be in thermal contact therewith.

34. (Currently Amended) The method of claim 1, wherein controlling the flux ~~the temperature~~ comprises applying a vaporizing cream to said target region.

35. (Original) The method of claim 1, wherein said target region is disposed at a depth below a skin surface of the subject.

36. (Cancelled)

37. (Currently Amended) The method of claim 23 ~~1~~, wherein the steps of controlling the flux ~~heating~~ and cooling ~~steps~~ are simultaneous.

38. (Currently Amended) The method of claim 23 ~~1~~, wherein the steps of controlling the flux ~~heating~~ and cooling ~~steps~~ are sequential.

39. (Currently Amended) A method of biostimulating a volume of ~~target region of a~~ tissue ~~disposed at a depth below a surface of the tissue~~, comprising:

~~irradiating said target region with radiation chosen to cause biostimulation within said target region, and~~

irradiating the volume of tissue with a first radiation from a first radiation source, the first radiation having one or more wavelengths to biostimulate the volume of tissue; and

~~controlling a temperature of a volume of said tissue through at least a portion of which said radiation traverses to reach said target region, wherein controlling the temperature comprises heating a first portion of said volume and cooling a second portion of said volume~~

irradiating the volume of tissue with a second radiation from a second radiation source;

modulating a flux of said second radiation to control the temperature within at least a first portion of the volume of tissue.

40. (Currently Amended) The method of claim 39, further comprising ~~wherein~~ cooling at least a second portion of said volume. ~~said second portion of said volume decreases biostimulation therein.~~

41. (Currently Amended) The method of claim 40 ~~39~~, wherein said cooling lowers a temperature of said volume to a value in a range of about 0°C to about 36°C.

42. (Currently Amended) The method of claim 40 ~~39~~, wherein said cooling lowers a temperature of said volume to a value in a range of about 15°C to about 36°C.

43. (Currently Amended) The method of claim 40 ~~39~~, wherein cooling said volume comprises cooling a portion of a patient's skin in proximity of said volume.

44. (Currently Amended) The method of claim 39, further comprising selecting said first radiation to have a wavelength component to be in a range of about 380 nm to about 1250 nm.

45. (Currently Amended) The method of claim 39, further comprising selecting said first radiation to have a wavelength component to be in a range of about 380 nm to about 600 nm.

46. (Currently Amended) The method of claim 39, further comprising selecting said first radiation to have a wavelength component to be in a range of about 380 nm to about 450 nm.

47. (Currently Amended) The method of claim 39, further comprising selecting said first radiation to have a wavelength component to be in a range of about 600 nm to about 700 nm.

48. (Currently Amended) A device for biostimulating a target region of tissue, comprising:

a first source for generating electromagnetic radiation having one or more wavelength components suitable for causing biostimulation in said target region~~,~~ and configured to deliver said radiation to the target region,

a second source for generating electromagnetic radiation configured to modulate a flux of radiation from said second source ~~be in thermal communication with said target region~~ for controlling a temperature profile within at least a first portion of said target region ~~in order to modulate efficacy of biostimulation caused by said electromagnetic radiation, the second source configured to heat a first portion of the target region, and~~

~~a cooler configured to be in thermal communication with said target region and configured to cool a second portion of the target region~~.

49. (Currently Amended) The ~~device~~ method of claim 39 ~~48~~, wherein said first and second portions overlap.

50. (Original) The device of claim 48, wherein said first source generates a substantially monochromatic radiation.

51. (Original) The device of claim 48, wherein said first source generates radiation having one or more wavelength components in a range of about 380 nm to about 1250 nm.

52. (Original) The device of claim 48, further comprising a cooling element configured to be in thermal communication with said target region and configured to cool a second portion of the target region. ~~wherein said second source comprises a source of electromagnetic radiation generating radiation suitable for heating said target region so as to enhance the efficacy of biostimulation~~.

53. (Original) The device of claim 52, wherein said second source generates radiation having one or more wavelength components in a range of about 380 nm to about 2700 nm.

54. (Currently Amended) The device of claim 48, further comprising a radiation guidance device optically coupled to said first source for delivering said radiation to the target region, wherein the radiation guidance device comprises a lens system for delivering the biostimulating radiation from the first source to the target region.

55. (Previously Presented) The device of claim 54, wherein said lens system comprises a Fresnel lens.

56. (Previously Presented) The device of claim 54, further comprising an optical fiber coupled at an input thereof to said first radiation source and an output thereof to said lens system so as to direct light generated by said radiation source to said lens system.

57. (Previously Presented) The device of claim 54, wherein said lens system comprises at least one movable lens to allow adjusting a cross-sectional area of a radiation beam generated by said first source for irradiating said target region.

58. (Previously Presented) The device of claim 48, further comprising a radiation guidance device optically coupled to said source for delivering said radiation to the target region.

59. (Previously Presented) The device of claim 58, wherein said radiation guidance device comprises

a beam splitter adapted to receive a radiation beam from said first source in order to generate a plurality of beam portions, and

one or more reflective surfaces optically coupled to said beam splitter to direct one or more of said beam portions to a surface of said tissue so as to irradiate said target region.

60. (Original) The device of claim 58, wherein said beam splitter comprises a prism.

61. (Original) The device of claim 58, wherein at least one of said reflective surfaces exhibits a curved profile.

62. (Cancelled)

63. (Cancelled)

64. (Cancelled)

65. (Cancelled)

66. (Cancelled)

67. (Cancelled)

68. (Cancelled)

69. (New) The device of claim 48, wherein said first source is an array of radiation sources.

70. (New) The device of claim 69, wherein said array of radiation sources is a set of light emitting diodes.

71. (New) The device of claim 69, wherein said array of radiation sources is a set of diode lasers.

72. (New) The device of claim 48, wherein said second source is an array of radiation sources.

73. (New) The device of claim 72, wherein said array of radiation sources is a set of light emitting diodes.

74. (New) The device of claim 72, wherein said array of radiation sources is a set of diode lasers.